

~~ABSTRACT OF THE DISCLOSURE~~

The present invention was achieved in order to provide an apparatus for pulling a single crystal, wherein a flow of an inert gas to a single crystal to be grown, pressure in an apparatus body, and a temperature environment are always kept constant by keeping the melt level at a prescribed position in spite of changes in volume of a quartz crucible between batches and thermal deformation of the quartz crucible, so that high quality single crystals can be pulled, comprising a reference reflector arranged inside an apparatus body, a level position measuring means to measure an actual level position by detecting a mirror image position of the reference reflector reflected in the melt surface using a one-dimensional CCD camera arranged outside the apparatus body, a crucible ascent speed adjustment value calculating means to calculate an adjustment value of the crucible ascent speed based on an output from the level position measuring means, an adjustment value adding means to add the adjustment value to the crucible ascent speed, and a level position controlling means to control the level position in the crucible by controlling a motor for crucible lifting based on an output from the adjustment value adding means to control the crucible ascent speed.